REMARKS/ARGUMENTS

Favorable consideration of this application is respectfully requested. Applicant has made an election to Invention I, claims 1 – 25 with traverse. Upon further election of a single disclosed species, applicant elected a single compound, namely, *N*-(4-aminobutyl)*N*-anthracen-9-ylmethyl-butane-1,4-diamine, trihydrochloride. However, Applicant notes the Examiner's statement of pending claims in the Office Action of March 29, 2005 as follows: "Claims 1 – 13, 20 and 21 are pending in the application. Claims 14-19 and 22-30 are withdrawn from consideration." The withdrawn claims, Claims 14-19 and 22-30, are now cancelled herein. Applicant reserves the right to file a divisional application directed to the subject matter in the cancelled claims.

In the specification, the paragraph beginning at page 5, line 11, has been amended to show the position of the cycloalkyl moiety between nitrogen atoms as identified in the compound formulas of the present invention. Support for the amendment is found in the specification at page 19, Table 1 (see Compound #31); page 20, lines, 12-14; page 22, Table 2 (see Compound #31; page 38, lines 22 – 23 and page 39, lines 1 – 5; and original claim 8. No new matter is added by this amendment.

Claims 1-13, 20 and 21 are amended. Claims 14-19 and 22-30 are cancelled. Claims 31 – 33 are added as new claims.

The pending claims 1 – 13, 20 and 21, 31-33 are directed to polyamine compounds useful in vectored systems, which effectively deliver anti-cancer drugs without requiring involvement of the immune system.

Claim 1 is amended in the preamble to use the singular form of speech for claiming a compound. This correction of style adds no new matter.

Claim 1 is also amended to show components X and Y as the cycloalkyl moiety between nitrogen atoms as identified in the formula for compounds of the present invention. Support for the amendment of Claim 1 is found in original claim 8, in the specification at page 19, Table 1 (see Compound #31); page 20, lines, 12 – 14; page 22, Table 2 (see Compound #31); page 38, lines 22 – 23 and page 39, lines 1 – 5. The specific cycloalkyl moiety identified in the specification is cyclohexane or a cyclohexyl moiety.

Claims 1 and 9 are amended to delete acyl, sulfonyl or carbamoyl substituted compounds in keeping with the Examiner's amendment and election to exclude these compounds from examination. Applicant's reserve the right to pursue the non-elected compounds in a divisional or continuation application.

Claims 1 and 2 are amended to delete pyrenylmethyl, a specific cycloalkyl moiety included in a similar compound of the prior art.

Claim 8 is rejected under 35 U.S.C. 112, fourth paragraph as failing to further limit the claim from which it depends. Claim 1 has now been amended so that Claim 8 falls within the scope of the broader claim. Claim 8 specifically names cyclohexane as the moiety between nitrogen atoms in a triamine compound thus, limiting and falling within the scope of amended Claim 1. The Examiner is respectfully requested to remove the rejection of Claim 8 under 35 U.S.C. 112.

Claims 1 and 2 were rejected under 35 U.S.C. 102b, as being anticipated by Bair et al. Chem Abst. 113:114786. Applicant has amended Claim 1 to delete the prenylmethyl moiety which is included in similar structures reported by Bair et al. Although Bair et al. report a compound with a formula where R is pyrenylmethyl, and R1, R3 and R4 is hydrogen and R2 is methyl, trihydrochloride salt, there is no recognition of the use of the polyamine compound for a

transporter system for anti-cancer drugs. Bair et al. even teach that DNA binding does not correlate with antitumor activity, thus, this reference would not suggest to nor encourage Applicant to pursue the use of the Bair et al. compounds. However, Applicant's deletion of the prenylmethyl moiety in claim 1 is believed to render moot the Examiner's rejection of Claims 1 and 2 under 35 U.S.C. 102b in view of Bair et al. Accordingly, Applicant respectfully requests the withdrawal of the rejection of Claims 1 and 2.

Claims 1 – 13, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Bergeron, Jr., US 6,235,794, Bergeron, Jr., US 6,342,534, Bowlin etal., US5,719,193 and Bair et al. Chem. Abst. 113:114786.

Applicant cited Bergeron, Jr. '534 and Bowlin et al '193 in the background discussion if the present invention and maintain the distinctions presented. Bergeron, Jr. '534 teaches the use of di-substituted polyamines on the terminal ends of the polyamine (N1 and N3), whereas, Applicant uses mono-substituted polyamines with substitutions on one terminal end (N1). Bergeron '794 has the same deficiency in anticipating the invention. Even though the disclosures of Bergeron, Jr. in '794 and '534 include triamines (3 nitrogens) and tetraamines (4 nitrogens) respectively, neither reference discloses the polyamine motif of the present invention requiring a large substituent on only one terminal end (N1).

Likewise with Bowlin et al '193, the teaching is directed to compounds useful in activating cells to be killed by the immune system and includes a naphthylalkyl substituent which may be an end substituent, whereas, Applicant requires that only one terminal end (N1) have a large cycloalkyl substituent for compounds that function without requiring the immune system. It is also acknowledged by the Examiner that Applicant's invention differs from the teachings of

Bergeron, Jr. '534, '794 and Bowlin et al '193 in that anthracenylalkyl or pyrenylalkyl are not specifically mentioned as arylalkyl moieties to substute end nitrogens.

Bair et al. provides a methyl group on N2 of the polyamine compound provided which creates a different polyamine than Applicant's compounds in amended Claims 1-13, 20 and 21. Accordingly, Applicant respectfully requests the withdrawal of the rejection of Claims 1-13, 20 and 21 under 35 USC 103 (a) based on the combined teachings that include Bair et al.

Applicant respectfully disagrees with the Examiner's combination of four references to reject Applicant's invented compounds. The mere fact that someone in the art can arrange parts of a reference to meet the terms of a claim is not sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for someone of ordinary skill in the art, without the benefit of the inventor's specification to make the necessary combinations and compound syntheses. Exparte Chicago Rawhide Mfg. Co. 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984).

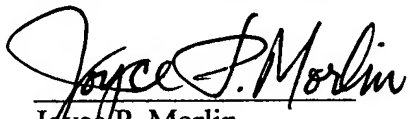
There is no teaching, nor suggestion for modifying the references of record to provide the novel compounds of the amended claims. Under well recognized rules of the MPEP (for example, section 706.02(j)), the teaching or suggestion to make the claimed compounds and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F. 2nd 488, 20 USPQ 2d 1438 (Fed. Cir. 1991).

Applicant contends the references cannot be modified to create Applicant's compounds claimed in Claims 1-13, 20 and 21. The courts have consistently held that obviousness cannot be established by combining the teachings of the prior art to preclude Applicant's claimed invention, absent some teaching, suggestion, incentive or motivation supporting the combination. Thus, the recited compounds are deemed allowable over the references cited. Applicant respectfully

requests that the rejection of Claims 1 – 13, 20 and 21 in the Office Action of March 29, 2005 be withdrawn.

In view of the foregoing considerations, it is respectfully urged that claims 1-13, 20 and 21 be allowed. Such action is respectfully requested. If the Examiner believes that an interview would be helpful, the Examiner is requested to contact the attorney at the below listed number.

Respectfully submitted,



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